



# Industry Forum for Veterans Drive Improvements Project Phase 1 St. Thomas, USVI



Presented By:  
**Department of Public Works**  
June 8, 2016



# *Agenda*



**Project Team**

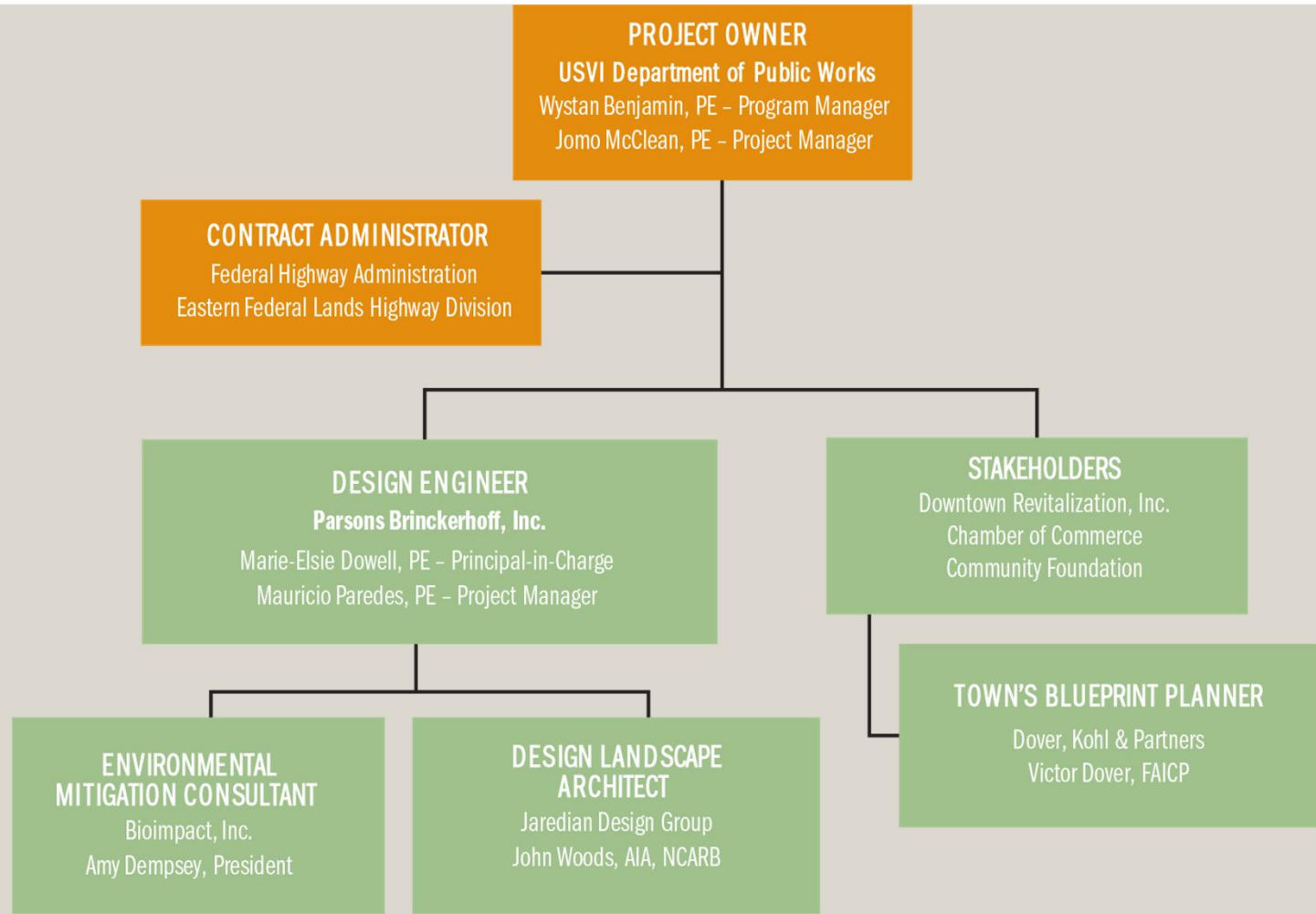
**Project Schedule &  
Procurement**

**Project Overview**

**Closing**



# Project Team





# *Project Schedule*





# *Procurement Method*



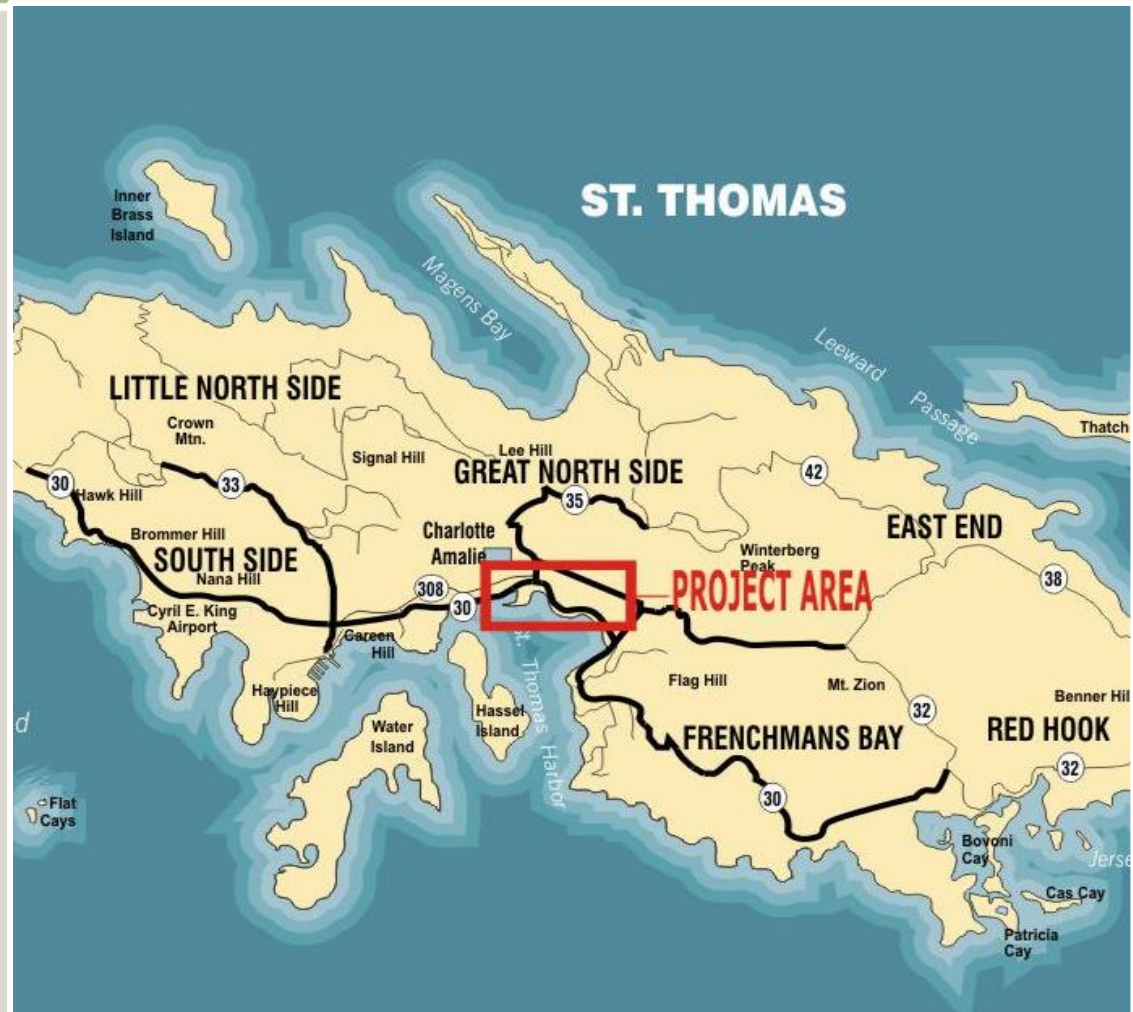
- One Step Request for Proposal (RFP)
  - Technical Proposal = The Contractor uses this part of the proposal to explain how they plan to construct the Project.
  - Price Proposal = The Contractor submits a cost to construct the Project.
- Selection/Award of the Contract
  - Review of Technical Proposals by Panel Members
  - Evaluation of Cost Proposals
  - Best Value Determination



# *Project Location*



- Waterfront of St. Thomas Harbor
- Charlotte Amalie Historic District
- Near Fort Christian National Historic Landmark





# *Project Limits*





# *Project Objectives*



- Upgrade Veterans Drive to Current Design Standards
- Provide Additional Capacity and Enhance Vehicular and Pedestrian Safety
- Enhance Aesthetics of the Corridor
- Provide Continuous Pedestrian Connection to the Waterfront





# *Project Scope*



- Widen existing road from 2 to 4 lanes
- New landscaped median with irrigation
- New sidewalks along north side
- New promenade and retaining wall along south side
- New lighting and signalization
- New signs and pavement markings





# *Project Scope continued*



- New storm drainage system
- Utility adjustment/relocation
- Benthic habitat mitigation





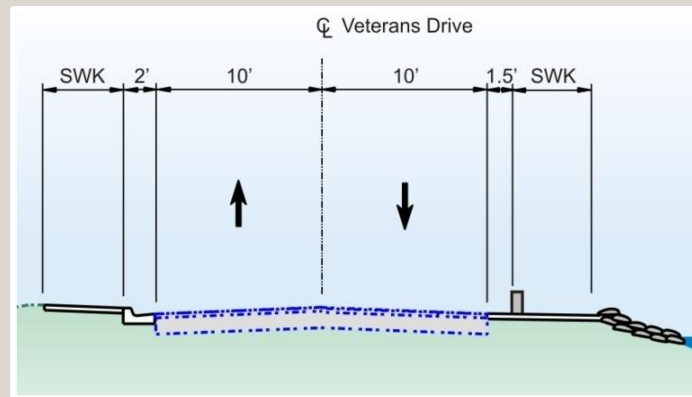
# Key Work Items



- 38,553 cubic yards of embankment
- 40,128 square feet of retaining wall (precast modular block seawall)
- 3,279 cubic yards of select granular backfill (wall leveling pad)
- 4,167 cubic yards of select granular backfill (wall backfill)
- 14,438 square yards of Subbase grading A 12-inch depth
- 4,191 Tons of Hot asphalt concrete pavement
- 7,039 square yards of sidewalk, concrete 4-inch
- 1,682 square yards of paving, cobblestone (eurocobble)
- 1,182 square yards of paving (brick)



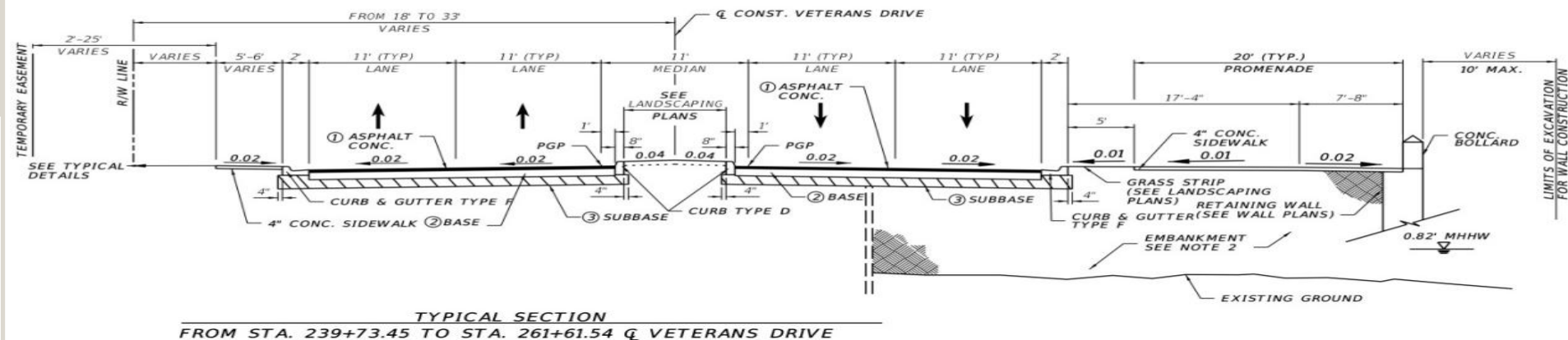
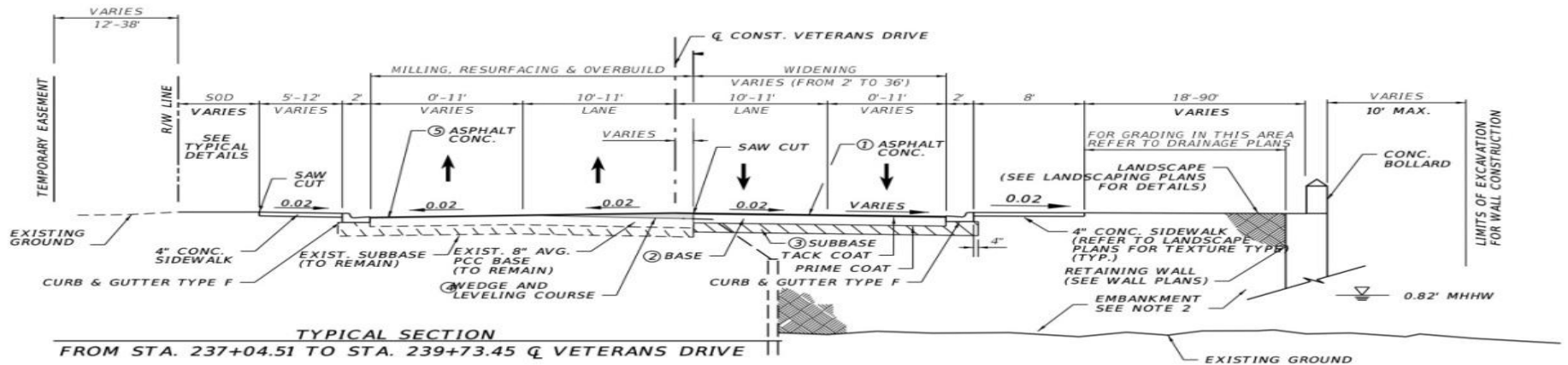
# Typical Roadway Sections



Existing Section

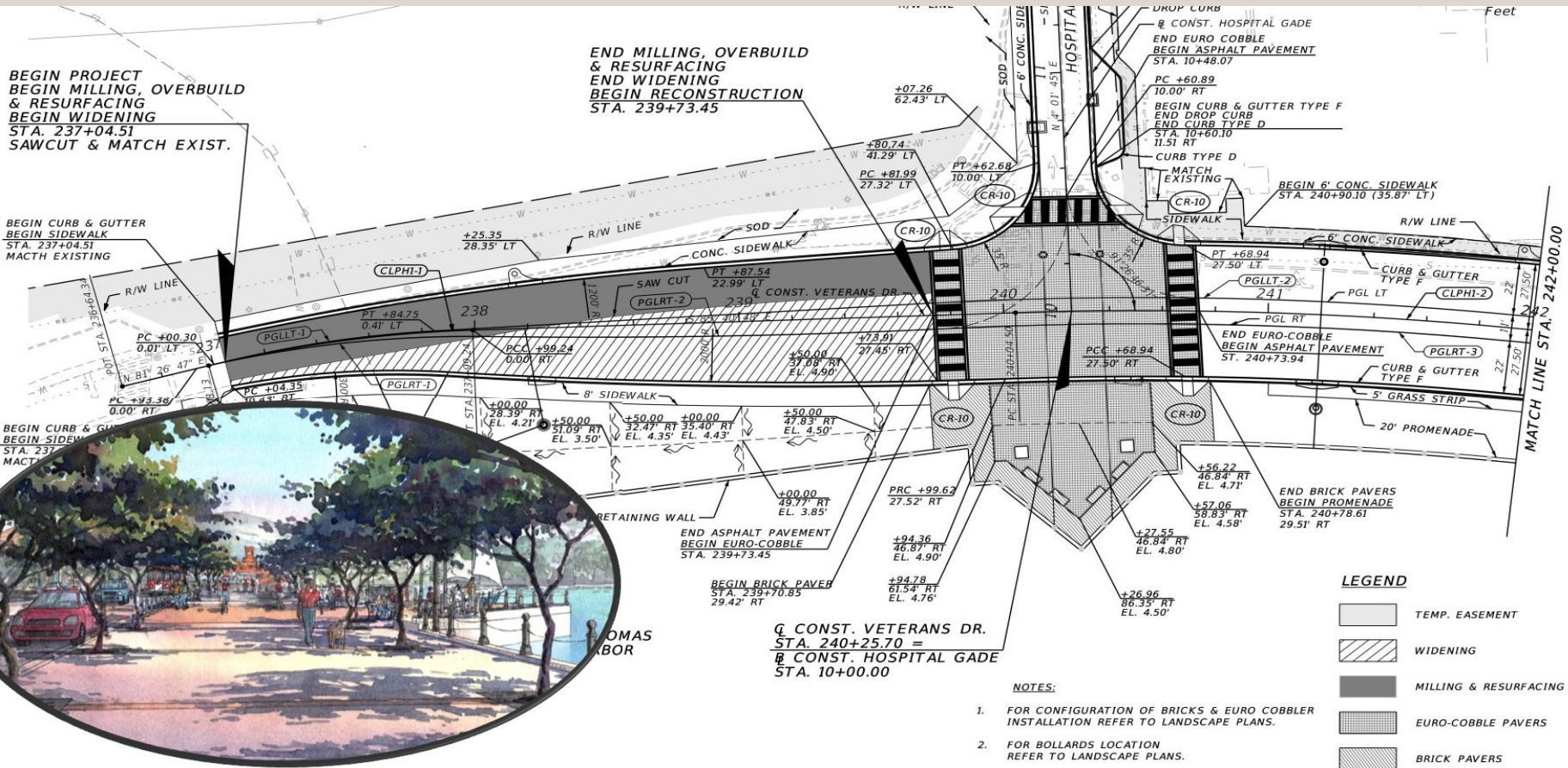


Proposed Section





# Roadway Plan



## Intersection at Hospital Gade

Project Team

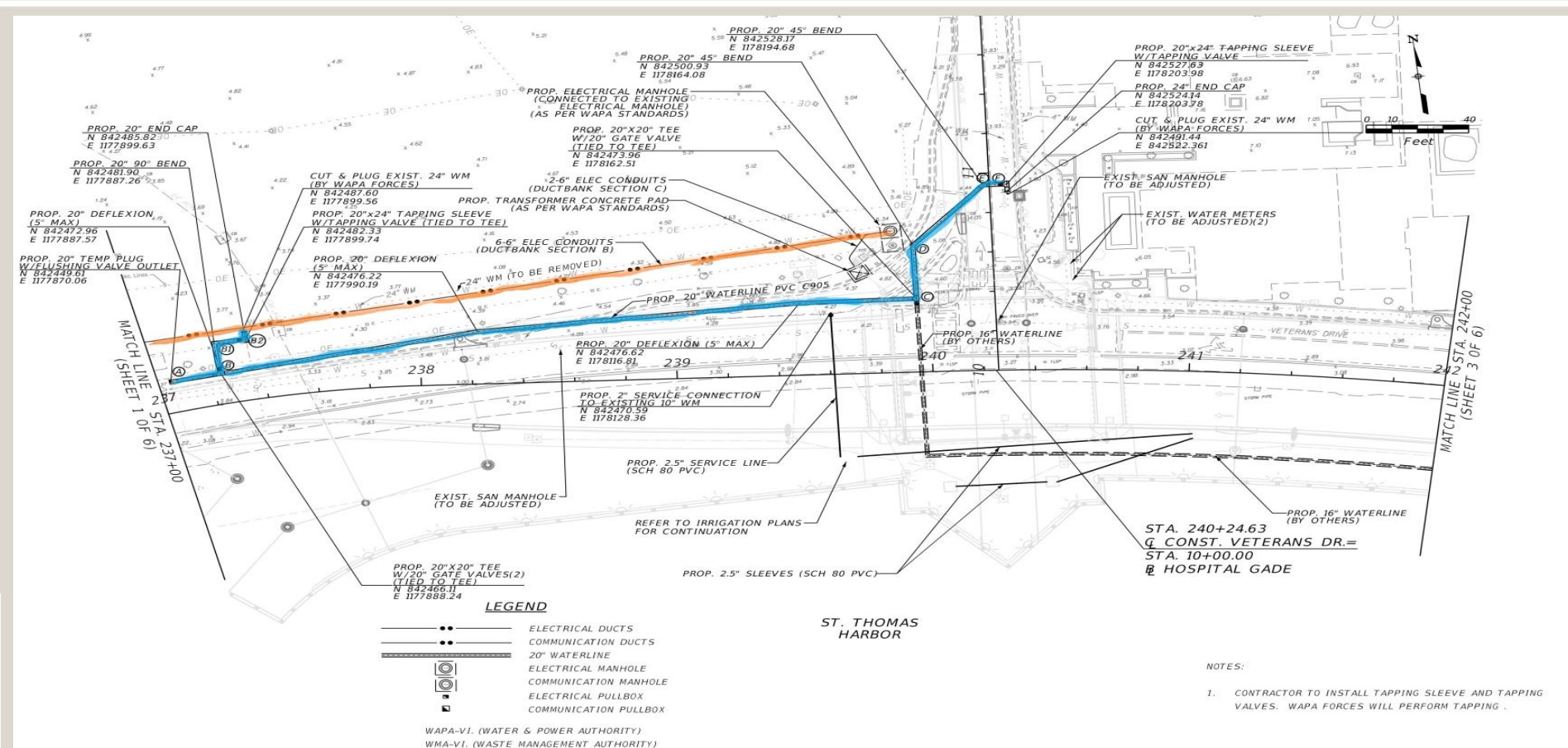
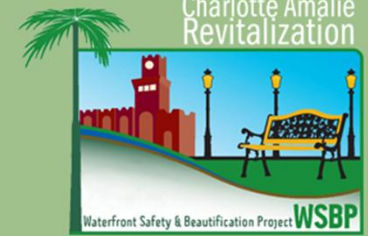
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# Utility Plan



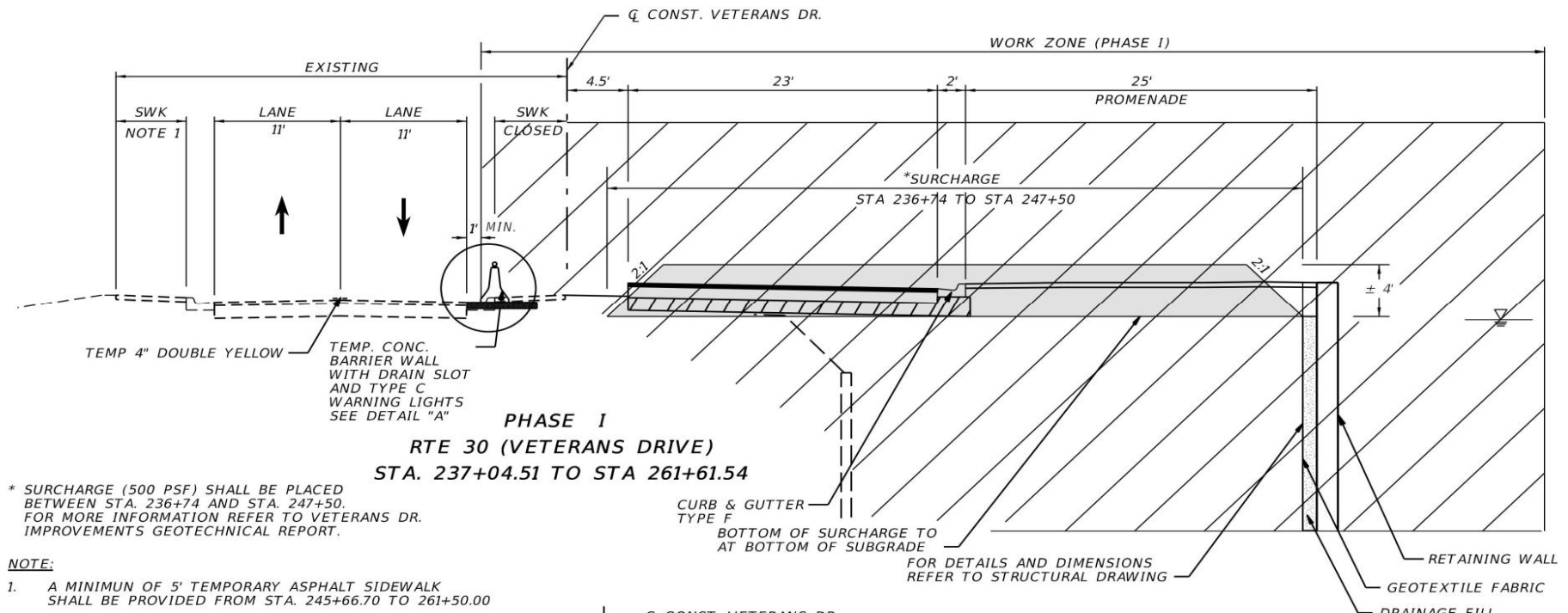
## New Power Feed and Water Main at Hospital Gade



# Construction Sequencing



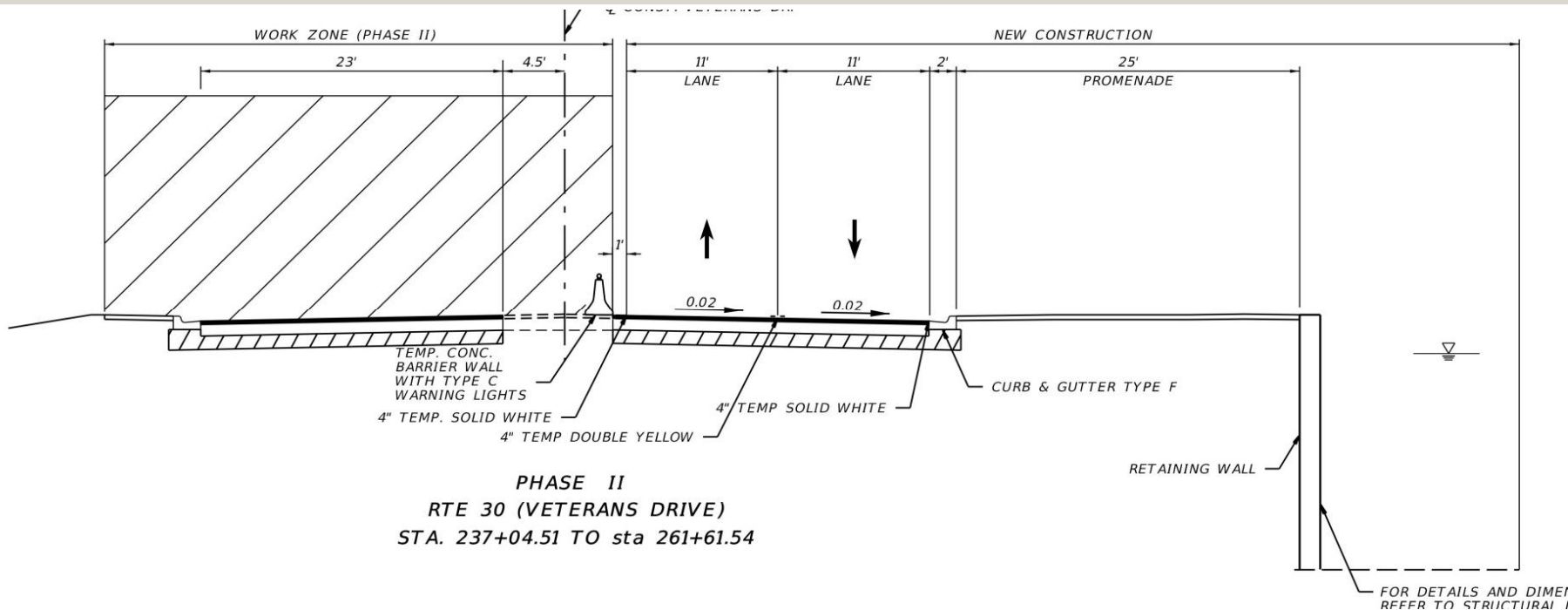
- Traffic Control
  - Phase 1:
    - Existing lanes remain open, new construction harbor side





# Construction Sequencing

- Traffic Control
  - Phase 2:
    - Switch traffic to new lanes, improve existing lanes

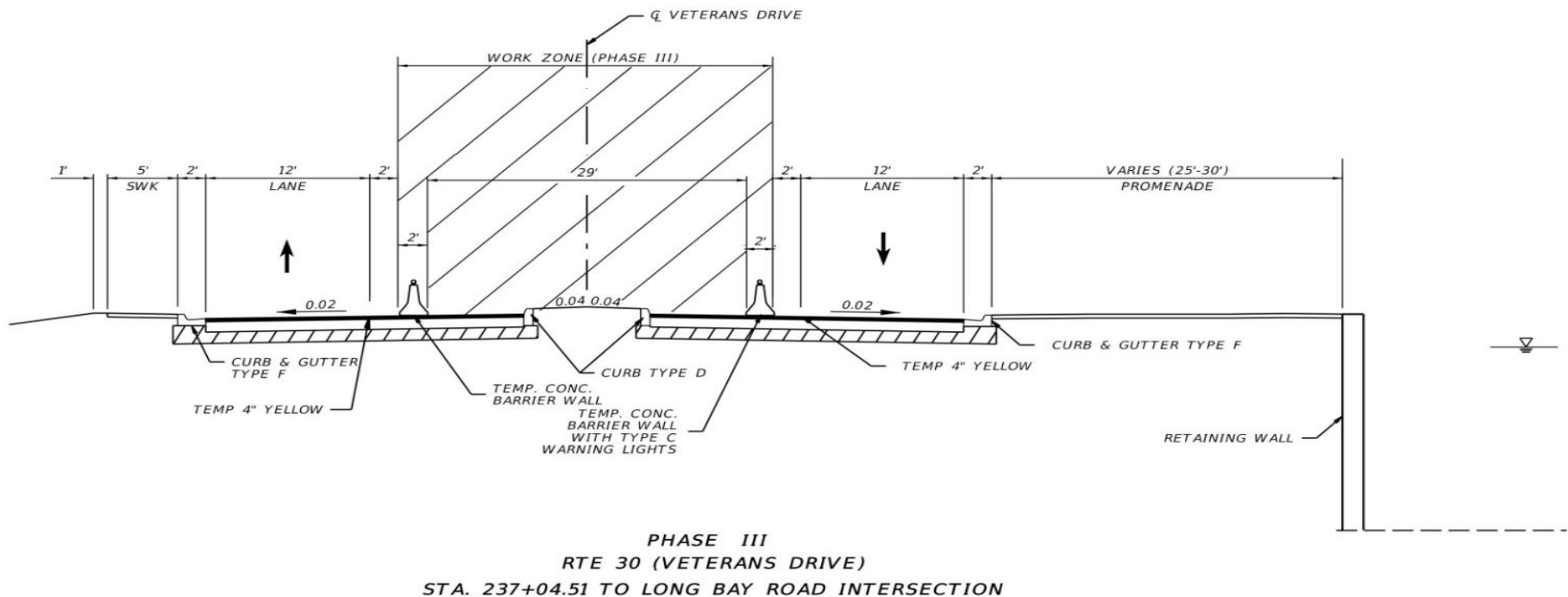




# Construction Sequencing

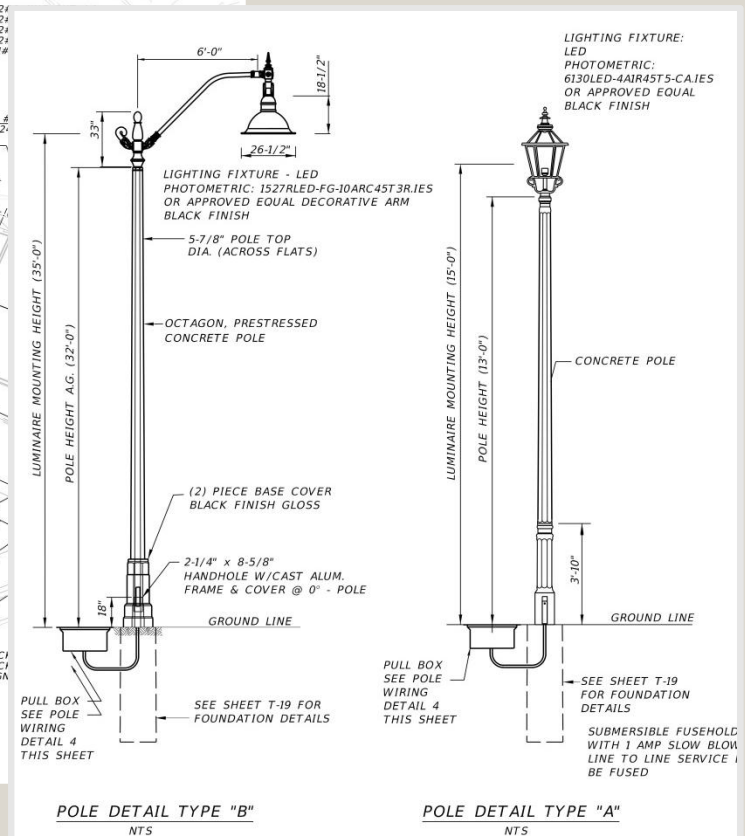
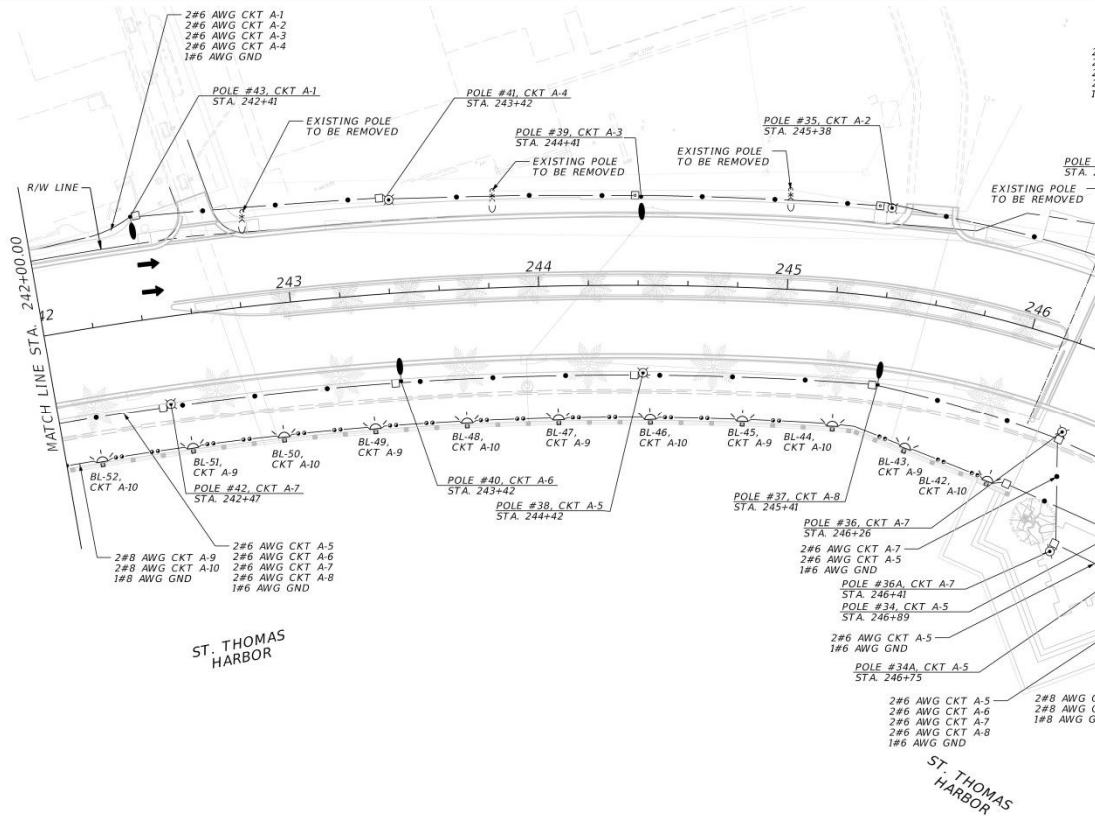


- Traffic Control
  - Phase 3:
    - Switch traffic to EB and WB new lanes, construct median





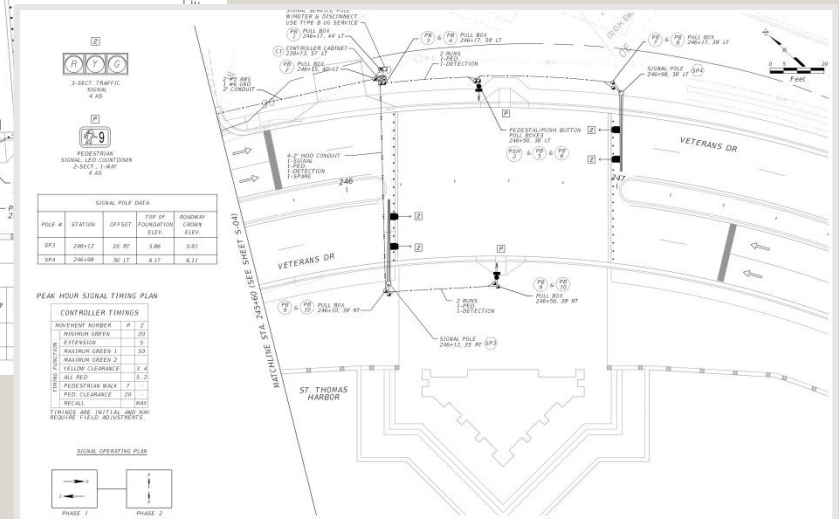
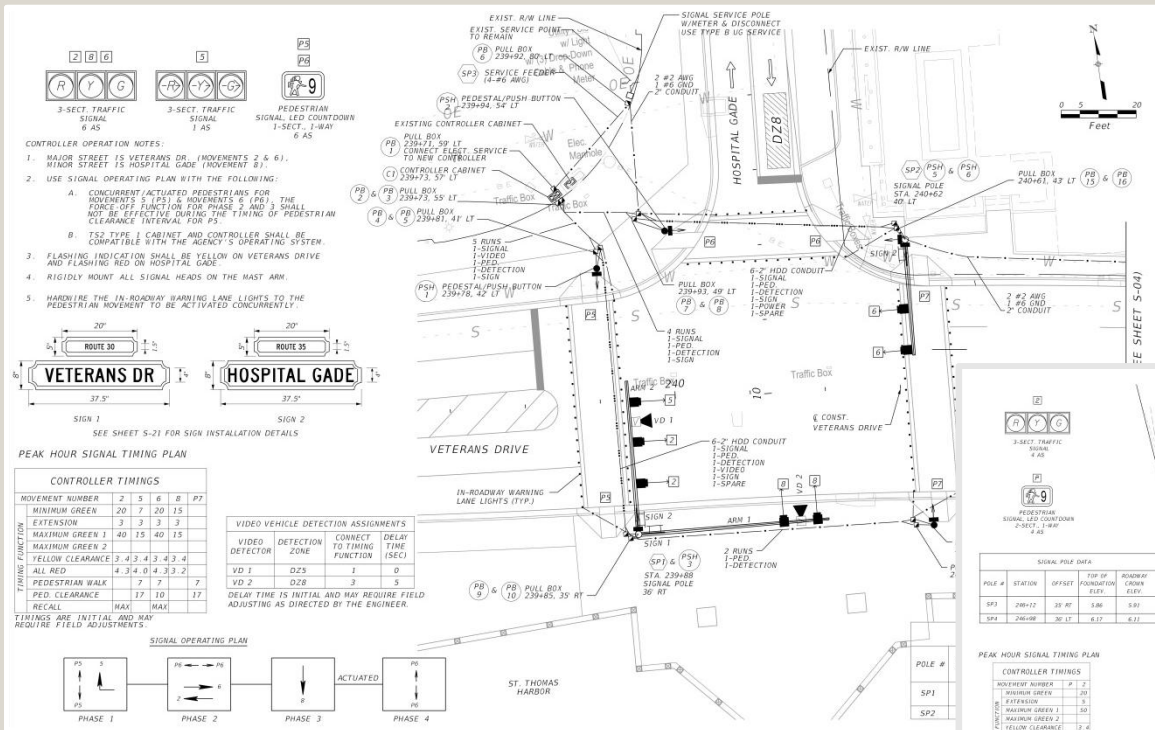
# Lighting



## Intersection at Kanal Gade



# Signalization



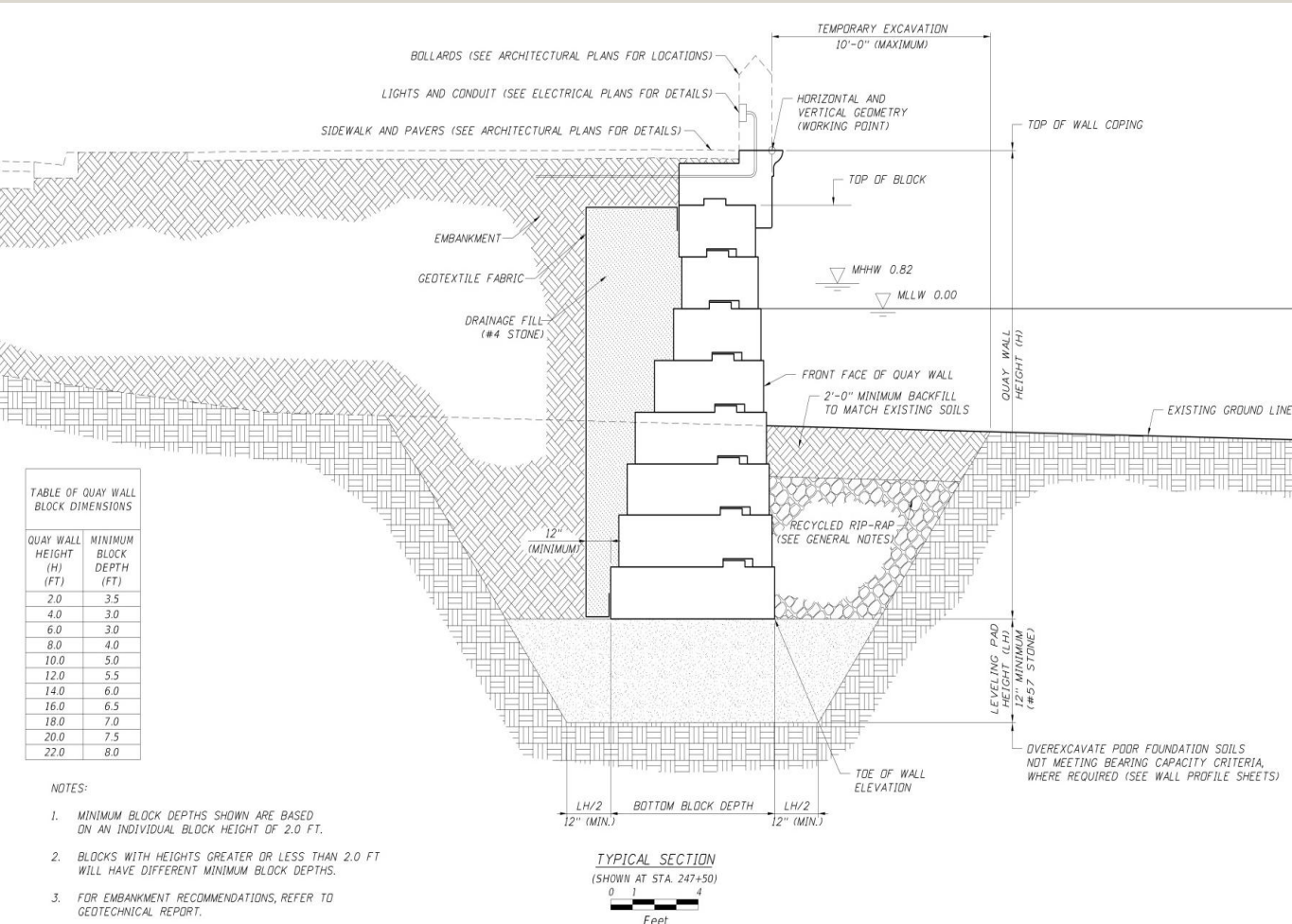
## Intersection at Hospital Gade & Boy Scouts Building



# Retaining Wall

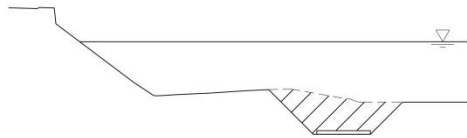


- Wall height up to 22 feet
- Exposed wall height up to 7 feet



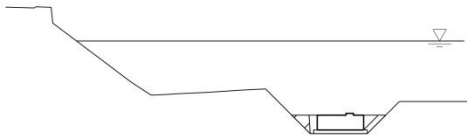


# Retaining Wall continued



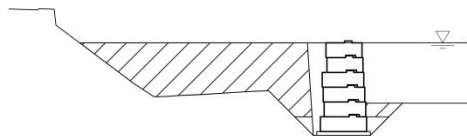
## PHASE 1

1. REMOVE SOILS, DEBRIS AND RIP-RAP ETC. AS DIRECTED BY THE CO.
2. CONTRACTOR TO VERIFY MINIMUM BEARING CAPACITY OF SOIL AND SUBMIT RESULTS TO CO FOR APPROVAL.
3. PLACE AND LEVEL BEDDING STONE FOUNDATION.



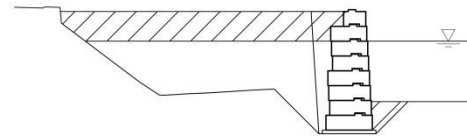
## PHASE 2

1. PLACE FIRST BLOCK ON BEDDING STONE FOUNDATION.
2. VERIFY HORIZONTAL AND VERTICAL GEOMETRY OF BLOCK.
3. ADJUST BLOCK AS REQUIRED.
4. BACKFILL.



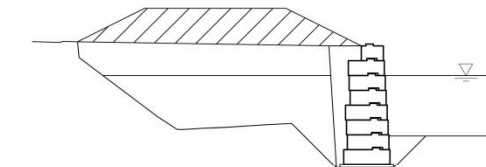
## PHASE 3

1. PLACE ADDITIONAL BLOCKS BELOW WATERLINE.
2. VERIFY HORIZONTAL AND VERTICAL GEOMETRY OF BLOCKS.
3. ADJUST BLOCK AS REQUIRED.
4. BACKFILL.



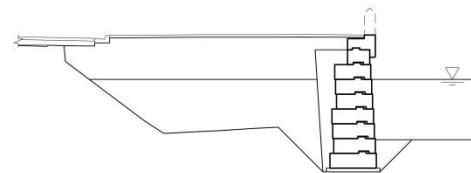
## PHASE 4

1. PLACE ADDITIONAL BLOCKS ABOVE WATERLINE.
2. VERIFY HORIZONTAL AND VERTICAL GEOMETRY OF BLOCKS.
3. ADJUST BLOCK AS REQUIRED.
4. BACKFILL.
5. COMPACT BACKFILL.



## PHASE 5

1. REPLACE REMAINING SOILS AS DIRECTED BY CO.
2. PLACE SOIL SURCHARGE IN ROADWAY EMBANKMENT AREA.
3. MONITOR SOIL SETTLEMENT.
4. REMOVE SOIL SURCHARGE WHEN SETTLEMENT HAS BEEN MET.



## FINAL

1. CONSTRUCT ROADWAY.
2. INSTALL WALL COPING.
3. CONSTRUCT SIDEWALK.



# Landscaping



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# *Benthic Mitigation*

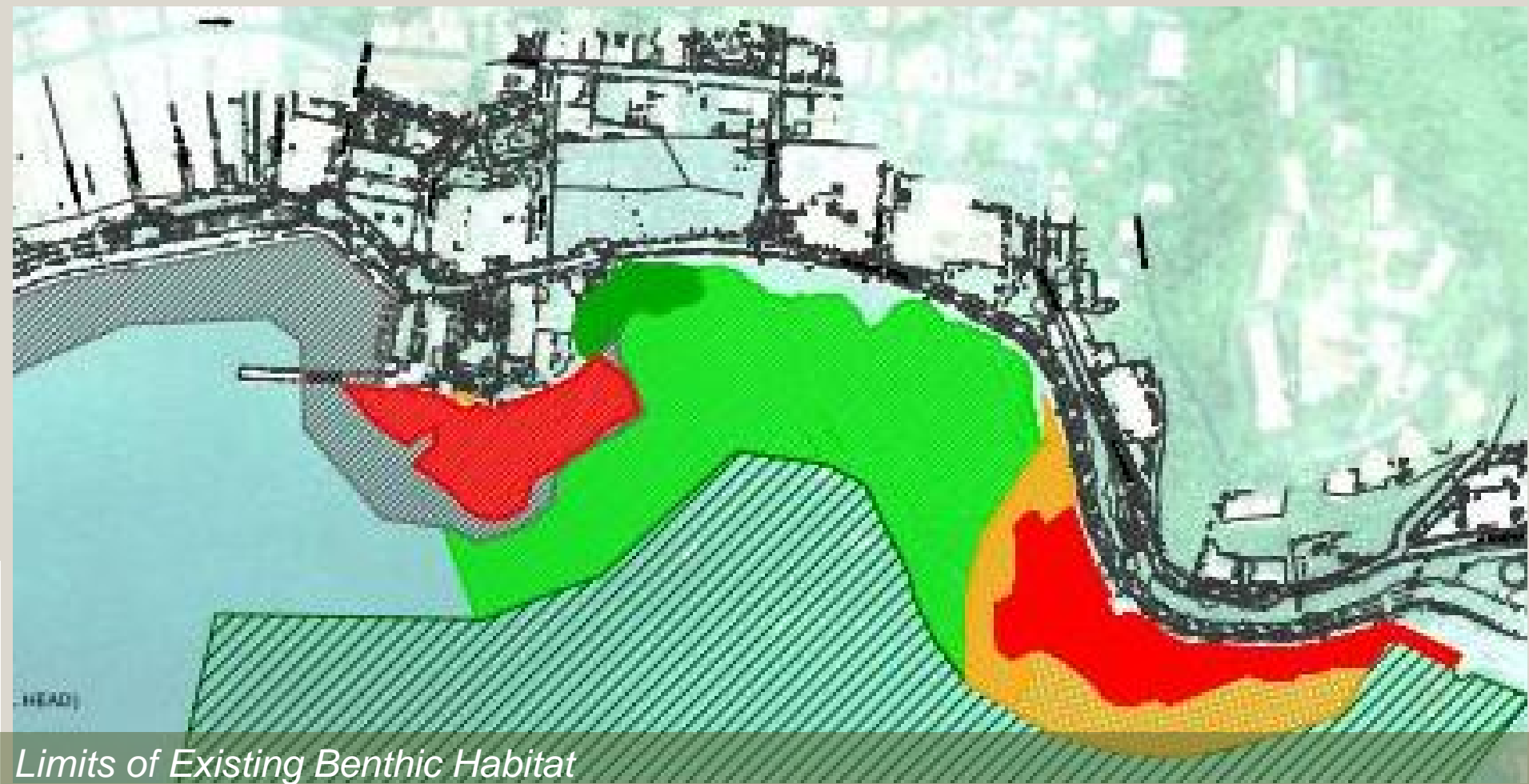


- Impacts
  - Seagrass – 1.15 acres
  - Corals – 2.97 acres
- Benthic Mitigation Program
  - Transplant Seagrass Bed
  - Transplant Coral Colonized Hard Bottom
  - Water Quality Monitoring





# *Benthic Mitigation*



*Limits of Existing Benthic Habitat*



# *Benthic Mitigation*



## **Contractor Requirements for Transplant Work**

- Qualified and experienced in the transplant of corals and seagrass
- Experienced in transplanting Endangered Species Act (ESA) listed species
- Escrow Account or Bond in the amount of the mitigation
- If 80% survival is not achieved an additional mitigation of approximate value will have to be agreed upon by federal agencies and undertaken



# *Benthic Mitigation*



## **Contractor Requirements for Transplant Work - Continued**

- It is imperative that the selected contractor have a performance record showing greater than 80% survival on their transplant projects
- The federal agencies are extremely strict on this requirement



# *Benthic Mitigation*



## **Water Quality and Environmental Monitoring Requirements**

- To be implemented during the project to ensure the surrounding environment is not impacted.
- Erosion and sedimentation control devices must be well maintained and adequate.
- Installation of additional measures may be required if water quality or environmental degradation is noted.



# *Benthic Mitigation*



## **Water Quality and Environmental Monitoring Requirements - Continued**

Additional measures may include:

- Additional Turbidity Barriers
- Slowing discharge of water
- Slowing work
- Stopping work until conditions return to ambient



# *Benthic Mitigation*



## **NOAA Guidelines for Sea Turtles and Marine Mammals**

- Vessel Strike Avoidance Measures and Reporting for Mariners and Sea Turtle and Smalltooth Sawfish Construction Conditions
- Siltation barriers shall be installed and monitored to prevent entanglement of sea turtle or smalltooth sawfish
- Barriers may not block sea turtle or smalltooth sawfish entry/exit without prior agreement from the NMFS



# *Benthic Mitigation*



## **NOAA Guidelines for Sea Turtles and Marine Mammals - Continued**

- All contractor vessels shall operate at “no wake/idle” speeds at all times where the draft of the vessel provides less than a four-foot clearance from the bottom.
- All vessels should follow deep-water routes (e.g., marked channels) whenever possible.
- If a sea turtle or smalltooth sawfish is seen within 100 yards of the construction operation or vessel, appropriate precautions shall be implemented



# *Benthic Mitigation*



## **NOAA Guidelines for Sea Turtles and Marine Mammals - Continued**

- These precautions shall include
  - Cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish.
  - Activities may not resume until the protected species has departed the project area of its own volition.



# *Regulatory Agencies*



- USVI Department of Planning and Natural Resources
- US Army Corps of Engineers
- US Fish and Wildlife Services
- National Marine Fisheries Services
- Federal Highway Administration
- State Historic Preservation
- Environmental Protection Agency



# Closing Remarks



*Questions?*

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